SUPPORTING INFORMATION

Reinterpretation of the mechanical reinforcement of polymer nanocomposites reinforced with cellulose nanorods

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Table S1: Fitting parameters used in the calculations for the model predictions.

Polymer	CNC types (aspect ratio)	E_r (GPa)	ΔE_r (GPa)	$E_r - E_s$ (GPa)
Eo-EPI (E_s= 3.2 MPa)	tCNC (A= 76)	6.4	0.40	6.40
	cCNC (A= 11)	0.3	0.05	0.24
Epoxy (E_s= 16 MPa)	tCNC (A= 84)	26.5	2.22	26.54
	cCNC (A= 11)	6.0	1.03	6.01
PVA (E_s= 840 MPa)	tCNC (A= 84)	80.0	1.03	79.10
	cCNC (A= 11)	15.4	6.11	14.59
PVAc (E_s= 1.4 MPa)	tCNC (A= 84)	9.4	2.6	9.3
	cCNC (A= 11)	0.7	0.2	0.68

Table S2: Evaluated parameters with current approach.

Polymers	E_{glassy} (GPa)	E_r (GPa) for High A	E_r (GPa) Low A	α (High A)	α (Low A)
EO-EPI	3	6.4	0.34	0.64	0.9
Epoxy	1.6	26.55	6.03	0.72	1.34
PVA	7.5	79.93	15.4	0.83	1.53
PVAc	1.7	9.35	0.72	0.78	1.12